



## SCHOTTKY BARRIER RECTIFIER

**SR320 - SR3200**

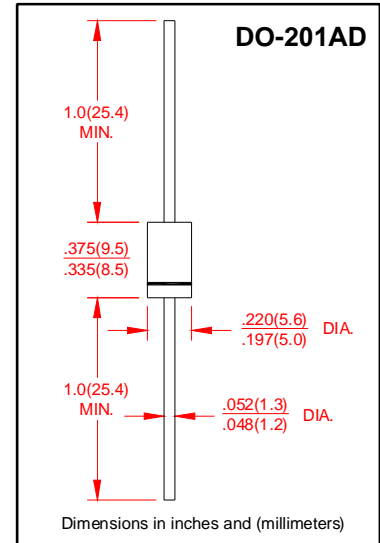
**REVERSE VOLTAGE - 20 to 200 V**  
**FORWARD CURRENT - 3 A**

### FEATURES

- Plastic package has underwriters laboratory flammability classification 94V-0
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

### MECHANICAL DATA

- Case: JEDEC DO-201 AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-SRD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041 ounce, 1.15 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified single phase, half wave, resistive or inductive load. for capacitive load, derate by 20%.

	SYMBOLS	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	SR3150	SR3200	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length	I(AV)	3.0									Amp
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	IFSM	80.0									Amps
Maximum Instantaneous Forward Voltage at 3.0A	VF	0.55			0.70		0.85	0.90	0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	TA = 25°C	0.2									mA
	TA = 100°C	20			10						
Typical Junction Capacitance (NOTE 3)	CJ	250			160						pF
Typical Thermal Resistance (NOTE 2)	RθJA	40.0									°C/W
	RθJI	10.0									
Operating junction Temperature Range	TJ	-65 to +150									°C
Storage Temperature Range	TSTG	-65 to +150									°C

#### Notes:

- Pulse test :300 us pulse width, 1% duty cycle
- Thermal resistance from junction to lead vertical P.C.B. mounted, 0.5" (12.7mm) lead length with 2.5\*2.5"(63.5\*63.5mm) copper pads
- Measured at 1MHz and reverse voltage of 4.0 volts



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## RATING AND CHARACTERISTIC CURVES SR320 - SR3200

FIG.1-FORWARD CURRENT DERATING CURVE

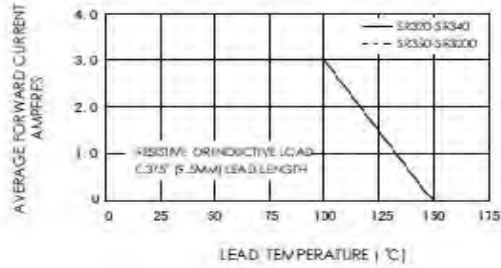


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

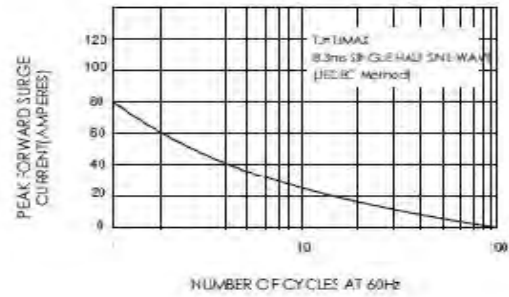


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

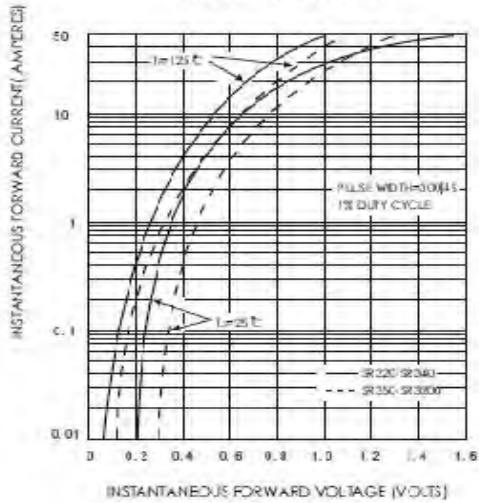


FIG.4-TYPICAL REVERSE CHARACTERISTICS

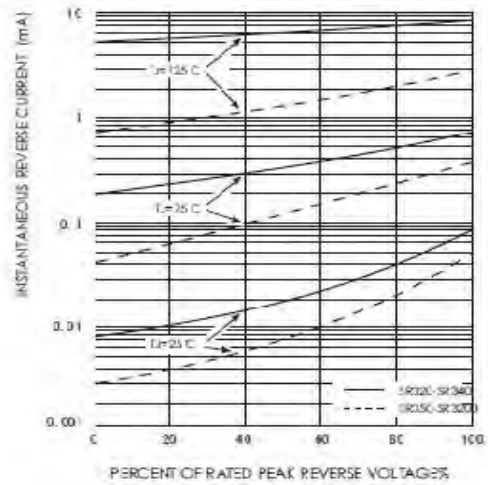


FIG.5-TYPICAL JUNCTION CAPACITANCE

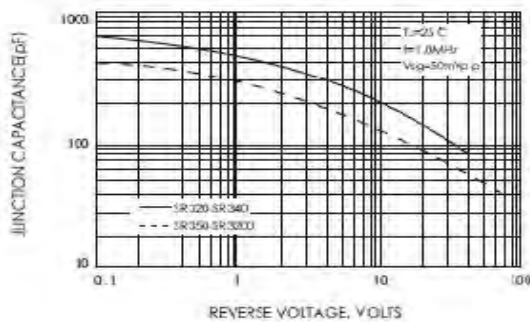


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

